LETTER TO THE EDITOR/LETTRE À LA RÉDACTION

An additional site of pudendal nerve compression?

Un autre site de compression du nerf honteux ?

Lefaucheur et al. [1] systematically reviewed the issue of the neurophysiological diagnosis of pudendal nerve entrapment syndromes. They nicely illustrated both feasibility and disadvantages of two different neurophysiological techniques that are suitable for the investigation of a suspected pudendal nerve entrapment: concentric needle electromyography and a group of pudendal nerve conduction studies. However, they omitted a present-day problem met by specialists in the pudendal nerve field, namely, that one or more branches of the pudendal nerve can be compressed elsewhere than in the pudendal canal but mimic the clinical picture of a pudendal nerve trunk entrapment inside the pudendal canal or in a close proximity to the ischial spine. One possible anatomical site of such an out-of-pudendal-canal compression is the subpubic concavity, where the dorsal nerve of penis/clitoris — a branch of the pudendal nerve — is running inside a tight osteofibrotic canal [2], close to the bone [3]. Some time ago, we suggested that the clinical signs of a sub-group of patients with the symptoms of the Alcock’s syndrome might be caused by an overuse injury in cyclists resulting from a repetitive prolonged pressure of the nose of the saddle against the sulcus nervi dorsalis, where the dorsal nerve of penis runs adjacent to the ventromedial border of the ischiopubic ramus [4]. These findings suggest that the close proximity of pubic bone and dorsal nerve of penis/clitoris might play a causative role in the development of an entrapment of the dorsal nerve of penis/clitoris. Such compression should be suspected in case of a decreased glandular and penile sensitivity together with genital numbness and erectile dysfunction in males or a decreased clitoridal sensitivity and genital numbness in females. On the contrary, in the absence of these symptoms, a compression of dorsal nerve of penis/clitoris should not be suspected.

Hypothetically, the simultaneous presence of a compression of both pudendal nerve trunk and dorsal nerve of penis/clitoris might cause diagnostic challenge. Importantly, pudendal canal decompression is unlikely to be successful in case of a compression of the dorsal nerve of penis/clitoris against the pubic bone. It would be most helpful if experts in neurophysiology could differentiate in vivo a compression of the pudendal trunk in the pudendal canal from a compression of the dorsal nerve in the sulcus nervi dorsalis penis/clitoridis. Unfortunately, as stated by the members of the “Club d’Électrophysiologie périténale”: “the site of pudendal nerve compression cannot be ascertained by electroneuromyographic examination” [1]. Hopefully, an ad hoc method will be developed in the future.

References


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